

FIG. 1

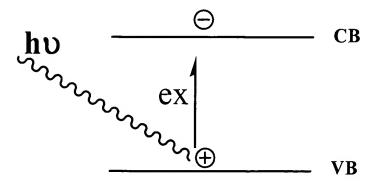


FIG. 2

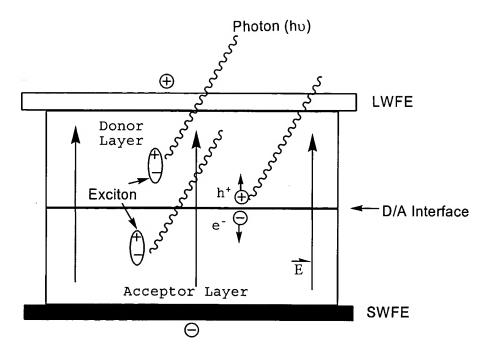
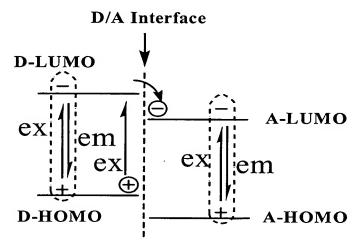


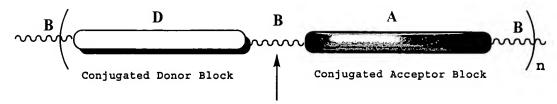
FIG. 3

Vaccum Level (0 eV)



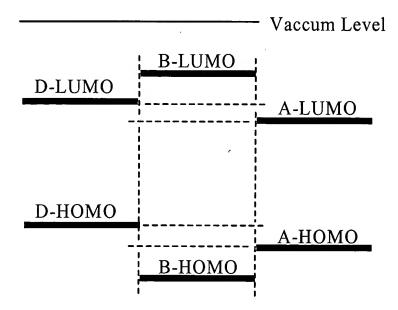
Inter-chain energy level schematic diagram of D/A bilayer or blend

"Primary Structure"



Non Conjugated & Flexible Bridge Chain

FIG. 5



Intra-chain energy level schematic diagram of -DBAB- type block copolymer

FIG. 6

"Secondary Structure"

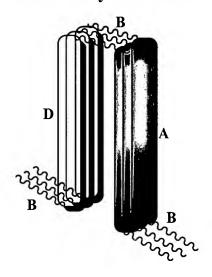
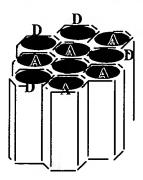


FIG. 7

"Tertiary Structure"



'HEX' Columnar Morphology

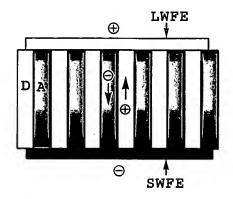


FIG. 9

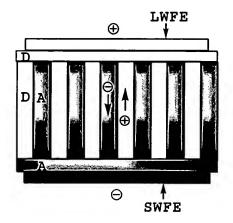
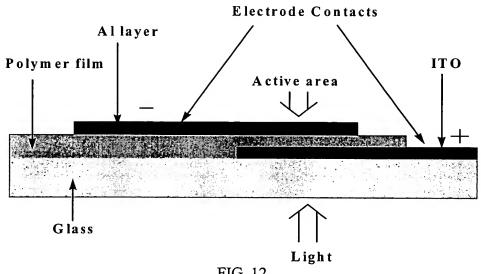


FIG. 10

FIG. 11





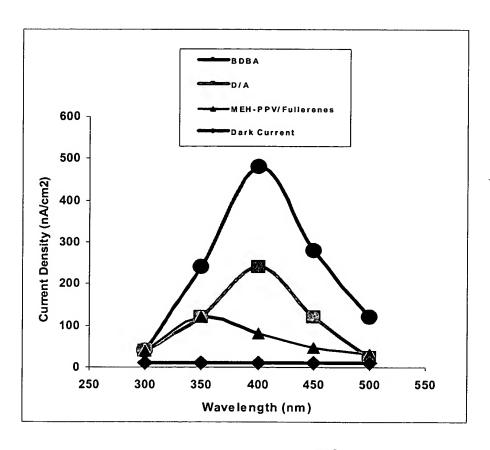


FIG. 13